

UNITED STATES DEPARTMENT OF COMMERCE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.
09/501.600	02/10/00	KOUNO		Υ	105398
_		MMC1/1024	\neg	EXAMINER	
Oliff & Berridge PLC			•	CHANG.	A
P O Box 19928 Alexandria VA 22320				ART UNIT	PAPER NUMBER
Hiexarumia	VH ZZOZO			2872	
				DATE MAILED:	10/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/501,600

Applicant(s)

Kouno

Examiner

Audrey Chang

Group Art Unit 2872



Responsive to communication(s) filed on	<u> </u>		
☐ This action is FINAL .			
Since this application is in condition for allowance except for formal matters, in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.	prosecution as to the merits is closed e.G. 213.		
A shortened statutory period for response to this action is set to expire 3 is longer, from the mailing date of this communication. Failure to respond within application to become abandoned. (35 U.S.C. § 133). Extensions of time may 1 37 CFR 1.136(a).	the period for response will cause the		
Disposition of Claims			
	is/are pending in the application.		
Of the above, claim(s)	_ is/are withdrawn from consideration.		
☐ Claim(s)	is/are allowed.		
	is/are rejected.		
Claim(s)	is/are objected to.		
Claims are subject	to restriction or election requirement.		
Application Papers See the attached Notice of Draftsperson's Patent Drawing Review, PTO-9 The drawing(s) filed on is/are objected to by the Examiner is is	miner. sroved disapproved. § 119(a)-(d). uments have been eau (PCT Rule 17.2(a)).		
Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152			
SEE OFFICE ACTION ON THE FOLLOWING	PAGES		

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrases "a plurality of filter layers" recited in claim 2 appears to be vague and indefinite since it fails to give a definite relationship between these layers and the optical filter recited in its based claim. This lacking of structure relationship renders the claim incomplete. Claim 4 inherits the rejection from its base claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 4. Claims 1, 3, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by the patent issued to Tsuyuki et al (PN. 6,069,651).

Tsuyuki et al teaches an imaging apparatus for endoscope wherein the imaging apparatus comprises a charge couple device (CCD) (16) serves as the photoelectric conversion device that converts an object

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image formed on the receiving surface of the CCD to an electrical signal. The object image is projected from an endoscope (1), via a lens barrel or an imaging optical system (58 or 6) to the CCD. Tsuyuki et al teaches that a filter unit (59 and 61 or 10) is interposed between the CCD and the lens barrel or the imaging optical system wherein the filter unit are held within a housing or filter frame (65 or 117) serves as the holding member with a stage formed at a portion of an external circumference of the optical filter unit for holding the filter unit, (please see Figures 6-7, 11-12, 13A, 19, 26 and 27, columns 8-9, 10, 12, 16, and 22). This reference has therefore anticipated the claims.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Tsuyuki et al in view of the patent issued to Ueda (PN. 5,548,373).

The imaging apparatus for endoscope that is comprised of the optical filter unit taught by Tsuyuki et al as described for claim 1 above has met all the limitations of the claims. With regard to claim 2, Tsuyuki et al teaches that the filter unit (59 and 61) may include a plurality of filter layers including a plurality layers of quartz filter and infrared cut filter, (please see column 8). However this reference does not teach that the filter layers have different sizes that form different stage size. But it is rather well known in the art that the filter layers in the filter unit may either have the same size or different size as desired as demonstrated by the teachings of Ueda wherein the filters (15 and 16) in front of the CCD have different sizes. It would then have

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been obvious to one skilled in the art to modify the size of the filter layers in the filter unit of Tsuyuki et al and accordingly to modify the size of the filter frame or holder and the stage for holding the filter unit in order to provide an alternative arrangement and design to the imaging apparatus.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Tsuyuki et al in view of the patent issued to Stravitz (PN. 4,302,078).

The imaging apparatus for endoscope that is comprised of the optical filter unit taught by Tsuyuki et al as described for claim 5 above has met all the limitations of the claim. This reference however does not teach explicitly that the filter frame or holder has a spring property that holds the filter unit by pressing the unit. Stravitz in the same field of endeavor teaches a photographic filter holder that has flexible members (9 and 10) that provides resilient constrictions to filter elements inserted in the filter holding slots or channels, (please see Figure 6 column 2). It would then have been obvious to one having ordinary skill in the art to apply the teachings of Stravitz to the filter unit frame or holder of Tsuyuki et al to add this flexible member in order to supply this resilient constriction to the filter layers for the benefit of better securing the filter layers in place and in alignment with the CCD.

Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent issued to Weng (PN. 6,011,661) discloses an optical holder for an optical apparatus.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chang whose telephone number is (703) 305-6208.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Papers related to this application may be submitted to Group 2800 through facsimile transmission.

Papers should be faxed to Group 2800 via PTO Fax Center (fax number 703-308-7722) located in Crystal Plaza 4.

A. Chang

October 20, 2000

Audrey Chang Primary Examiner Primary Examiner Technology Center 2800